**IN THE CLAIMS**

Please substitute the following listing of claims for the previous listing of claims.

1. (Currently amended) A substrate support comprising:

(a) a support structure; and

(b) a coating on the support structure, the coating comprising a diamond-like carbon material having a carbon-hydrogen network, and the coating having a contact surface comprising a coefficient of friction of less than about 0.3 and a hardness of at least about 8 GPa, whereby the contact surface of the coating is capable of reducing abrasion and contamination of a substrate that contacts the contact surface.

2-3 (Cancel).

4. (Currently amended) A support according to claim [[2]] 1 wherein the diamond-like carbon material comprises a diamond-like nanocomposite having networks of (i) carbon and hydrogen, and (ii) silicon and oxygen.

5. (Currently amended) A support according to claim [[2]] 1 wherein the diamond-like carbon material comprises a resistivity of from about $10^4$ Ohm·cm to about $10^8$ Ohm·cm.

6. (Currently amended) A support according to claim 5 wherein the carbon diamond-like material comprises from about 0.1 atom % to about 10 atom % of a metal additive, whereby the metal additive changes the resistivity of the coating.

7. (Previously pending) A support according to claim 1 wherein the support structure comprises:

(a) a dielectric covering an electrode; and

(b) a plurality of mesas on the dielectric, the mesas comprising the coating with the contact surface thereon.

8. (Original) A support according to claim 7 wherein the dielectric comprises a ceramic.

9. (Original) A support according to claim 7 further comprising a metal-containing adhesion layer between the dielectric and the coating of the mesas.

10. (Original) A support according to 1 wherein the support structure comprises a heat exchanger comprising at least one of (i) a heater, and (ii) conduits for passing a heat exchange fluid therethrough.

11. (Cancel).

12. (Currently amended) A substrate support comprising:

(a) a dielectric covering an electrode; and

(b) a plurality of mesas on the dielectric, the mesas comprising a coating of a diamond-like carbon material over a titanium layer.

13. (Original) A support according to claim 12 wherein the coating comprises a coefficient of friction of less than about 0.3 and a hardness of at least about 8 GPa.

14. (Original) A support according to claim 12 wherein the coating comprises a thickness of from about 1 to about 20 microns.

15. (Original) A support according to claim 14 wherein the titanium layer comprises a thickness of from about 0.25 to about 4 microns.

16. (Currently amended) A support according to claim 12 wherein the diamond-like carbon material comprises a diamond-like nanocomposite having networks of (i) carbon and hydrogen, and (ii) silicon and oxygen.

17. (Cancel).

18. (Currently amended) A support according to claim 12 wherein the diamond-like carbon material comprises a metal additive.

19. (Original) A support according to claim 12 wherein the dielectric comprises AlN or $Al_2O_3$.

20. (Currently amended) A support according to claim 12 wherein the diamond-like carbon material is co-deposited with a metal additive by a process combining physical vapor deposition of the metal additive in a plasma enhanced chemical vapor deposition environment.

21-57. (Cancelled).

58. (Currently amended) A substrate support comprising a support structure comprising:

(a) a dielectric covering an electrode;

(b) a plurality of mesas on the dielectric, the mesas comprising a coating comprising a diamond-like carbon material having a carbon-hydrogen network, the coating having a contact surface comprising a coefficient of friction of less than about 0.3 and a hardness of at least about 8 GPa, whereby the contact surface of the coating is capable of reducing abrasion and contamination of a substrate that contacts the contact surface; and

(c) a metal-containing adhesion layer between the dielectric and the coating of the mesas.

59-60. (Cancel).

61. (Currently amended) A support according to claim [[59]] 58 wherein the diamond-like carbon material comprises a diamond-like nanocomposite having networks of (i) carbon and hydrogen, and (ii) silicon and oxygen.

62. (Currently amended) A support according to claim [[59]] 58 wherein the diamond-like carbon material comprises a resistivity of from about $10^4$ Ohm·cm to about $10^8$ Ohm·cm.

63. (Currently amended) A support according to claim 62 wherein the diamond-like carbon material comprises from about 0.1 atom % to about 10 atom % of a metal additive, whereby the metal additive changes the resistivity of the coating.

64. (Previously pending) A support according to claim 58 wherein the dielectric comprises a ceramic.

65. (Currently amended) A substrate support comprising:

(a) a dielectric covering an electrode; and

(b) a plurality of mesas on the dielectric, the mesas comprising a coating of a diamond-like carbon material over a titanium layer comprising a thickness of from about 0.25 to about 4 microns, the coating comprising a thickness of from about 1 to about 20 microns.

66. (Cancel).

67. (Currently amended) A support according to claim 65 wherein the diamond-like carbon material comprises a diamond-like nanocomposite having networks of (i) carbon and hydrogen, and (ii) silicon and oxygen.

68. (Previously pending) A support according to claim 65 wherein the coating comprises a coefficient of friction of less than about 0.3 and a hardness of at least about 8 GPa.

69. (Previously pending) A support according to claim 65 wherein the dielectric comprises a ceramic.

70. (Currently amended) A substrate support comprising:

(a) a dielectric covering an electrode; and

(b) a plurality of mesas on the dielectric, the mesas comprising a coating of a diamond-like carbon material over a titanium layer, the diamond-like carbon material comprising a diamond-like nanocomposite having networks of (i) carbon and hydrogen, and (ii) silicon and oxygen.

71. (Previously pending) A support according to claim 70 wherein the coating comprises a coefficient of friction of less than about 0.3 and a hardness of at least about 8 GPa.

72. (Currently amended) A support according to claim 70 wherein the diamond-like carbon material comprises a resistivity of from about $10^4$ Ohm·cm to about $10^8$ Ohm·cm.

73. (Currently amended) A support according to claim 72 wherein the diamond-like carbon material comprises from about 0.1 atom % to about 10 atom % of a metal additive, whereby the metal additive changes the resistivity of the coating.

74. (Currently amended) A substrate support comprising:

(a) a dielectric covering an electrode; and

(b) a plurality of mesas on the dielectric, the mesas comprising a coating of a diamond-like carbon material over a titanium layer, the diamond-like material comprising a metal additive.

75. (Previously pending) A support according to claim 74 wherein the coating comprises a coefficient of friction of less than about 0.3 and a hardness of at least about 8 GPa.

76. (Previously pending) A support according to claim 74 wherein the coating comprises a thickness of from about 1 to about 20 microns.

77. (Currently amended) A support according to claim 74 wherein the diamond-like carbon material comprises a diamond-like nanocomposite having networks of (i) carbon and hydrogen, and (ii) silicon and oxygen.

78. (Currently amended) A substrate support comprising:

(a) a dielectric covering an electrode, the dielectric comprising AlN or $Al_2O_3$; and

(b) a plurality of mesas on the dielectric, the mesas comprising a coating of a diamond-like carbon material over a titanium layer.

79. (Previously pending) A support according to claim 78 wherein the coating comprises a coefficient of friction of less than about 0.3 and a hardness of at least about 8 GPa.

80. (Previously pending) A support according to claim 78 wherein the coating comprises a thickness of from about 1 to about 20 microns.

81. (Currently amended) A support according to claim 78 wherein the diamond-like carbon material comprises a diamond-like nanocomposite having networks of (i) carbon and hydrogen, and (ii) silicon and oxygen.

82. (Currently amended) A substrate support comprising:

(a) a dielectric covering an electrode; and

(b) a plurality of mesas on the dielectric, the mesas comprising a coating of a diamond-like carbon material over a titanium layer, the diamond-like material being co-deposited with a metal additive by a process combining physical vapor deposition of the metal additive in a plasma enhanced chemical vapor deposition environment.

83. (Previously pending) A support according to claim 82 wherein the coating comprises a coefficient of friction of less than about 0.3 and a hardness of at least about 8 GPa.

84. (Previously pending) A support according to claim 82 wherein the coating comprises a thickness of from about 1 to about 20 microns.

85. (Currently amended) A support according to claim 82 wherein the diamond-like carbon material comprises a diamond-like nanocomposite having networks of (i) carbon and hydrogen, and (ii) silicon and oxygen.